

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P331352-927

Luminaire Tested: **S122DIP-S675D725U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331352-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DIP-S675D725U927-4F0-1E-UDD-D1
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 675 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 725 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4183.5 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.08')
CIE Type: General Diffuse

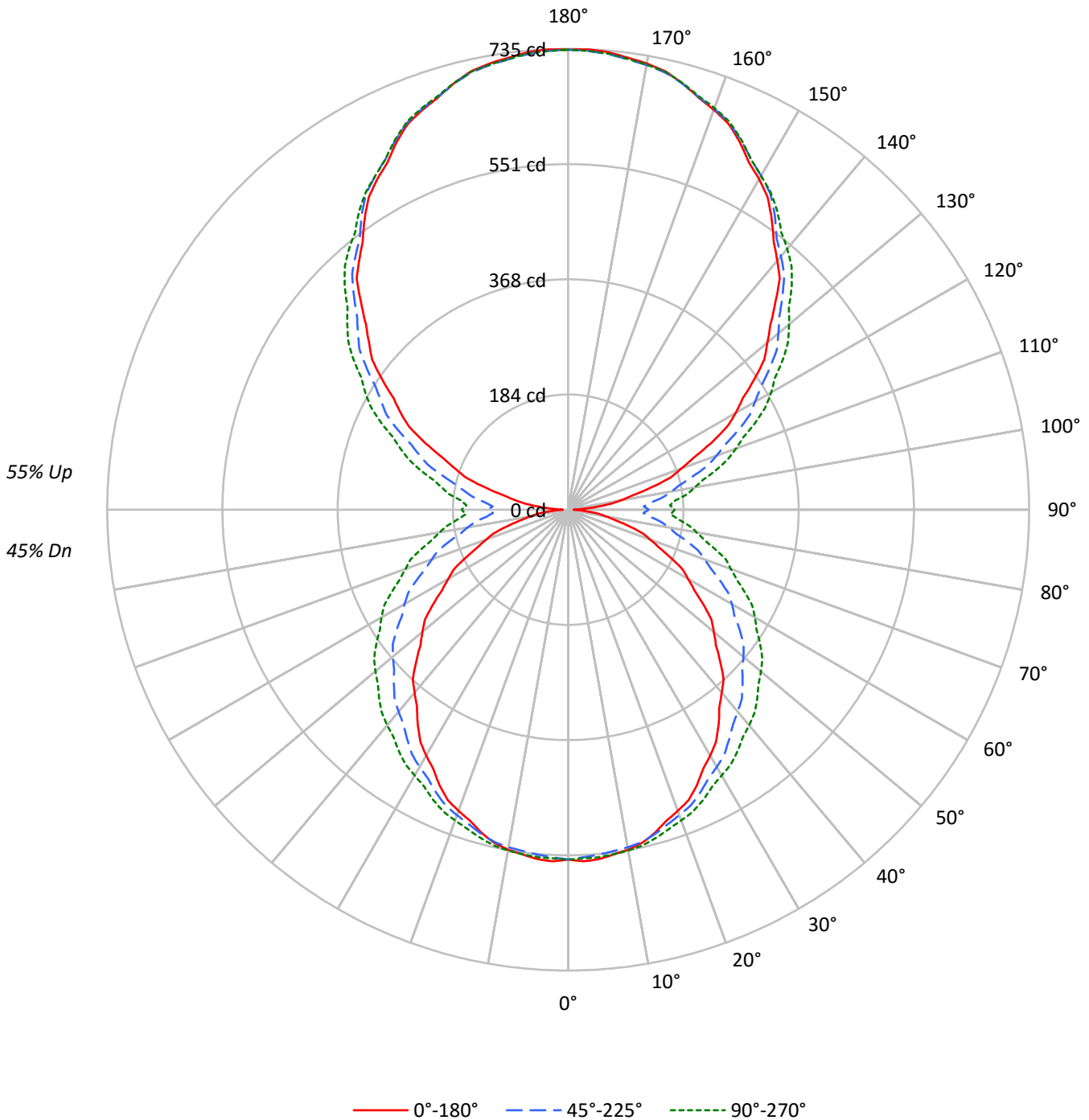
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	95	90	86	82	87	83	79	76	69	66	63	56	54	52	44	42	41	35
2	86	78	72	66	79	72	66	61	59	55	51	48	45	42	38	35	33	28
3	78	68	60	54	71	63	56	50	52	47	43	42	38	35	33	30	28	24
4	71	60	52	45	65	55	48	42	46	40	36	37	33	30	29	26	24	20
5	65	53	45	39	59	49	42	36	41	35	31	33	29	25	26	23	20	17
6	60	48	39	33	55	44	36	31	37	31	26	30	25	22	24	20	18	15
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	21	18	16	13
8	51	39	31	25	47	36	29	24	30	24	20	25	20	17	20	16	14	11
9	48	35	28	23	44	33	26	21	28	22	18	23	18	15	18	15	13	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	14	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9009	9009	9009
5°	9053	8672	8638
10°	8996	8417	8321
15°	8873	8146	7988
20°	8716	7854	7665
25°	8561	7573	7372
30°	8343	7286	7079
35°	8122	7007	6870
40°	7890	6771	6665
45°	7670	6558	6488
50°	7431	6366	6313
55°	7184	6161	6135
60°	6882	5948	5948
65°	6564	5697	5724
70°	6211	5427	5485
75°	5759	5163	5263
80°	5048	4895	5040
85°	4369	4658	4864



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.9	1.3
10°-20°	151.6	3.6
20°-30°	229.8	5.5
30°-40°	279.8	6.7
40°-50°	301.1	7.2
50°-60°	292.4	7.0
60°-70°	255.3	6.1
70°-80°	196.5	4.7
80°-90°	134.8	3.2
90°-100°	137.3	3.3
100°-110°	210.8	5.0
110°-120°	290.7	6.9
120°-130°	349.1	8.3
130°-140°	374.6	9.0
140°-150°	359.0	8.6
150°-160°	299.6	7.2
160°-170°	198.7	4.8
170°-180°	69.5	1.7
0°-30°	434.3	10.4
0°-40°	714.1	17.1
0°-60°	1307.5	31.3
0°-90°	1894.2	45.3
90°-120°	638.8	15.3
90°-150°	1721.4	41.1
90°-180°	2289.0	54.7
0°-180°	4183.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	558	558	558	558	558	
5°	560	557	552	557	556	53
15°	534	535	535	542	542	150
25°	485	491	498	507	510	223
35°	418	432	447	464	471	261
45°	343	365	393	417	426	265
55°	263	293	334	362	374	235
65°	180	220	267	299	310	178
75°	100	145	196	230	242	105
85°	29	79	131	164	176	31
90°	9	64	128	158	170	7
95°	39	83	133	162	172	42
105°	137	164	206	234	244	145
115°	251	265	299	321	329	248
125°	362	369	392	411	418	324
135°	467	474	483	499	504	361
145°	566	570	574	579	581	354
155°	647	649	651	654	652	298
165°	704	703	703	707	705	198
175°	732	731	729	733	730	70
180°	734	734	734	734	734	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	558.0	558.0	558.0	558.0	558.0	558.0	558.0	558.0	558.0	558.0	558.0
2.5°	561.3	560.8	560.4	559.9	559.5	558.8	557.8	556.7	555.8	554.8	555.5
5°	559.6	559.0	558.6	558.0	557.5	556.7	555.6	554.5	553.4	552.3	553.4
7.5°	554.6	554.2	553.9	553.5	553.2	552.5	551.8	550.9	550.1	549.3	550.6
10°	550.7	550.3	550.0	549.6	549.3	548.8	548.3	547.8	547.2	546.7	548.1
12.5°	544.2	544.3	544.4	544.5	544.5	544.4	544.0	543.6	543.2	542.8	544.2
15°	533.8	534.1	534.5	534.8	535.2	535.4	535.4	535.4	535.4	535.4	536.9
17.5°	520.1	520.9	521.7	522.4	523.2	523.9	524.4	525.0	525.5	526.2	527.8
20°	511.1	512.0	512.9	513.8	514.7	515.5	516.2	517.0	517.7	518.4	520.4
22.5°	501.4	502.4	503.5	504.5	505.6	506.6	507.6	508.6	509.6	510.6	512.6
25°	485.2	486.5	487.7	489.0	490.3	491.7	493.3	495.0	496.5	498.1	500.3
27.5°	465.8	467.9	469.9	472.0	474.0	476.0	477.9	479.8	481.7	483.6	486.3
30°	452.9	455.2	457.6	459.9	462.2	464.5	466.9	469.2	471.6	473.9	476.7
32.5°	438.6	441.2	443.9	446.5	449.2	451.9	454.6	457.3	460.1	462.9	466.2
35°	418.1	421.1	424.2	427.2	430.3	433.6	437.0	440.4	443.8	447.2	451.1
37.5°	395.8	399.3	402.8	406.3	409.9	413.8	418.3	422.7	427.1	431.5	435.9
40°	380.9	384.8	388.8	392.8	396.7	401.1	406.0	410.8	415.7	420.5	425.2
42.5°	366.7	370.6	374.5	378.5	382.5	387.2	392.8	398.4	403.9	409.6	414.6
45°	342.9	347.8	352.6	357.4	362.3	367.9	374.1	380.5	386.7	393.0	398.6
47.5°	319.4	324.7	330.0	335.3	340.6	346.9	354.3	361.6	369.0	376.4	382.2
50°	303.2	308.9	314.4	320.0	325.5	332.4	340.5	348.6	356.6	364.7	370.8
52.5°	287.7	293.6	299.4	305.3	311.2	318.4	326.9	335.4	343.9	352.4	358.7
55°	262.8	269.3	275.8	282.3	288.7	296.6	305.9	315.3	324.6	334.0	340.5
57.5°	238.2	245.6	252.9	260.2	267.4	275.8	285.3	294.9	304.4	313.9	320.9
60°	220.8	228.5	236.2	244.0	251.7	260.7	270.9	281.1	291.4	301.7	308.5
62.5°	205.3	213.3	221.3	229.3	237.3	246.4	256.7	266.9	277.2	287.4	294.7
65°	179.5	188.3	197.2	206.0	214.8	224.4	235.0	245.7	256.3	266.9	274.3
67.5°	155.9	165.1	174.4	183.5	192.7	202.7	213.6	224.4	235.3	246.1	253.6
70°	139.1	148.5	157.8	167.2	176.5	186.7	197.9	209.0	220.1	231.3	239.0
72.5°	123.6	133.2	142.8	152.5	162.1	172.5	183.9	195.1	206.4	217.7	225.3
75°	99.5	109.6	119.6	129.7	139.7	150.5	162.0	173.5	185.0	196.5	204.2
77.5°	76.2	86.7	97.3	107.7	118.3	129.4	141.1	152.8	164.5	176.1	183.9
80°	60.7	71.6	82.5	93.6	104.5	115.8	127.5	139.2	150.8	162.6	170.1
82.5°	47.7	58.5	69.3	80.2	91.0	102.3	114.2	126.0	137.8	149.6	157.2
85°	29.2	40.2	51.4	62.5	73.7	85.0	96.5	108.0	119.5	131.0	138.6
87.5°	16.0	27.0	38.0	49.1	60.1	71.7	83.8	95.9	108.1	120.2	127.4
90°	8.7	20.8	32.9	44.9	57.0	70.3	84.8	99.3	113.9	128.4	135.3
92.5°	18.5	29.4	40.3	51.2	62.1	73.4	85.2	97.0	108.8	120.6	127.7
95°	38.7	48.5	58.3	68.1	78.0	88.4	99.4	110.5	121.6	132.6	139.4
97.5°	64.5	73.2	81.9	90.6	99.3	109.2	120.0	130.9	141.8	152.7	159.3
100°	84.3	92.1	99.8	107.6	115.3	124.5	134.9	145.4	155.8	166.4	172.9
102.5°	104.5	111.4	118.4	125.3	132.3	140.9	151.2	161.5	171.8	182.1	188.7
105°	137.2	142.8	148.5	154.1	159.7	167.3	176.9	186.6	196.1	205.8	212.3
107.5°	171.0	175.7	180.5	185.3	190.0	196.9	205.9	214.8	223.8	232.7	238.8
110°	192.1	196.5	200.9	205.3	209.8	216.3	225.2	234.0	242.8	251.6	257.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	215.9	219.8	223.6	227.4	231.2	237.3	245.6	253.8	262.1	270.4	275.8
115°	250.9	253.7	256.5	259.4	262.1	267.4	275.3	283.0	290.9	298.7	304.0
117.5°	285.0	287.4	289.8	292.2	294.6	299.1	305.9	312.6	319.2	326.0	331.0
120°	308.3	310.1	312.0	313.8	315.6	319.6	325.7	331.7	337.8	343.9	349.0
122.5°	329.6	331.2	332.8	334.5	336.0	339.8	345.9	351.8	357.8	363.8	368.4
125°	362.0	363.2	364.5	365.7	366.9	370.3	375.6	380.9	386.3	391.6	396.0
127.5°	394.3	395.7	397.1	398.5	399.9	402.7	406.8	410.9	415.0	419.2	423.2
130°	414.6	416.2	417.9	419.5	421.0	423.6	427.1	430.6	434.1	437.6	441.6
132.5°	437.4	438.7	440.0	441.2	442.5	444.7	447.6	450.6	453.5	456.5	460.1
135°	467.1	468.6	470.1	471.6	473.1	474.9	477.0	479.0	481.2	483.2	486.9
137.5°	499.2	500.3	501.5	502.7	504.0	505.1	506.3	507.4	508.6	509.7	512.9
140°	518.5	519.5	520.5	521.7	522.7	523.7	524.8	525.9	526.9	527.9	530.8
142.5°	538.3	539.3	540.4	541.5	542.5	543.3	543.8	544.4	544.9	545.5	547.9
145°	565.9	566.9	567.9	568.9	569.8	570.7	571.6	572.4	573.1	574.0	575.2
147.5°	591.4	592.5	593.7	594.8	596.0	596.8	597.4	597.9	598.5	599.0	599.4
150°	608.7	609.5	610.3	611.2	612.0	612.7	613.2	613.8	614.3	614.9	615.3
152.5°	624.0	624.9	625.7	626.5	627.3	628.0	628.8	629.4	630.0	630.7	631.2
155°	647.1	647.5	647.9	648.3	648.7	649.1	649.5	650.0	650.4	650.8	651.5
157.5°	666.8	667.0	667.3	667.6	667.9	668.1	668.4	668.6	668.8	669.1	670.0
160°	678.7	678.9	679.2	679.5	679.8	679.9	680.1	680.2	680.4	680.5	681.4
162.5°	689.5	689.6	689.7	689.7	689.8	689.8	690.0	690.1	690.3	690.4	691.3
165°	704.0	703.9	703.8	703.6	703.5	703.4	703.4	703.4	703.4	703.4	704.4
167.5°	716.1	715.7	715.3	714.9	714.5	714.3	714.3	714.2	714.2	714.2	715.2
170°	722.6	722.2	721.8	721.4	721.0	720.6	720.6	720.4	720.3	720.1	721.1
172.5°	727.1	726.7	726.3	725.8	725.4	725.2	725.0	724.8	724.8	724.6	725.6
175°	732.5	732.1	731.7	731.3	730.9	730.6	730.2	730.0	729.7	729.4	730.4
177.5°	734.7	734.4	734.1	733.7	733.4	733.2	732.9	732.7	732.5	732.3	732.9
180°	733.7	733.7	733.7	733.7	733.7	733.7	733.7	733.7	733.7	733.7	733.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	558.0	558.0	558.0	558.0	558.0	558.0	558.0	558.0
2.5°	556.2	556.9	557.6	557.9	557.5	557.3	557.0	556.7
5°	554.5	555.6	556.7	557.1	556.9	556.7	556.6	556.3
7.5°	551.8	553.2	554.4	555.0	554.8	554.6	554.4	554.3
10°	549.5	551.0	552.5	553.0	552.9	552.7	552.5	552.3
12.5°	545.7	547.1	548.6	549.1	549.0	548.8	548.7	548.4
15°	538.6	540.2	541.9	542.6	542.4	542.2	542.0	541.9
17.5°	529.5	531.2	532.9	533.8	533.8	533.8	533.8	533.8
20°	522.4	524.3	526.2	527.3	527.3	527.3	527.3	527.3
22.5°	514.6	516.6	518.5	519.7	519.9	520.2	520.5	520.8
25°	502.5	504.6	506.8	508.1	508.7	509.2	509.8	510.3
27.5°	489.1	491.8	494.6	496.1	496.5	496.9	497.3	497.6
30°	479.7	482.5	485.4	487.1	487.7	488.2	488.7	489.3
32.5°	469.5	472.9	476.1	478.2	479.3	480.2	481.2	482.1
35°	455.1	459.1	463.0	465.6	466.9	468.2	469.4	470.6
37.5°	440.3	444.7	449.1	451.9	453.3	454.6	455.9	457.2
40°	429.8	434.5	439.2	442.4	443.9	445.6	447.2	448.9
42.5°	419.7	424.8	429.9	433.3	434.9	436.6	438.2	439.7
45°	404.2	409.7	415.3	419.0	420.8	422.6	424.4	426.2
47.5°	388.0	393.9	399.7	403.5	405.5	407.5	409.5	411.5
50°	376.9	383.0	389.2	393.2	395.2	397.2	399.1	401.1
52.5°	365.0	371.2	377.5	381.7	383.7	385.9	388.0	390.1
55°	346.9	353.4	359.9	364.2	366.6	368.9	371.3	373.6
57.5°	327.9	334.9	341.8	346.5	348.9	351.3	353.6	356.0
60°	315.3	322.1	329.0	333.7	336.1	338.7	341.2	343.7
62.5°	301.9	309.2	316.5	321.3	323.6	326.0	328.4	330.7
65°	281.6	289.0	296.4	301.2	303.6	305.9	308.2	310.5
67.5°	261.0	268.5	275.9	280.9	283.3	285.7	288.2	290.7
70°	246.8	254.4	262.2	267.1	269.3	271.5	273.6	275.8
72.5°	232.9	240.4	248.0	253.1	255.7	258.3	260.9	263.5
75°	212.0	219.7	227.4	232.4	234.8	237.1	239.5	241.8
77.5°	191.5	199.2	206.9	212.0	214.5	217.1	219.5	222.0
80°	177.6	185.2	192.7	197.8	200.3	202.8	205.3	207.9
82.5°	164.7	172.2	179.8	184.7	187.1	189.5	191.9	194.2
85°	146.1	153.7	161.2	166.2	168.7	171.3	173.8	176.3
87.5°	134.7	142.0	149.2	154.1	156.4	158.7	161.1	163.3
90°	142.3	149.2	156.1	160.7	163.0	165.2	167.5	169.8
92.5°	134.8	141.9	149.0	153.7	155.8	158.0	160.2	162.4
95°	146.3	153.1	159.9	164.3	166.2	168.1	169.9	171.8
97.5°	166.0	172.6	179.3	183.6	185.8	187.8	189.9	192.0
100°	179.6	186.2	192.9	197.2	199.0	200.8	202.6	204.5
102.5°	195.4	201.9	208.6	212.8	214.6	216.5	218.3	220.1
105°	218.9	225.5	232.0	236.3	238.3	240.3	242.2	244.2
107.5°	245.0	251.1	257.3	261.0	262.4	263.7	265.1	266.4
110°	263.1	268.9	274.6	278.3	279.8	281.4	283.0	284.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	281.2	286.6	292.1	295.6	297.2	299.0	300.6	302.3
115°	309.2	314.4	319.7	323.1	324.6	326.2	327.8	329.4
117.5°	336.0	341.0	345.9	349.1	350.5	352.0	353.4	354.8
120°	353.9	359.0	364.0	367.3	368.9	370.4	372.0	373.6
122.5°	372.9	377.5	382.0	385.0	386.3	387.8	389.1	390.5
125°	400.4	404.9	409.3	412.3	413.8	415.3	416.8	418.2
127.5°	427.1	431.1	435.1	437.6	438.7	439.9	441.0	442.2
130°	445.7	449.7	453.8	456.2	457.1	458.0	458.9	459.8
132.5°	463.7	467.2	470.8	473.1	474.0	475.1	476.0	477.1
135°	490.4	494.1	497.7	500.1	501.1	502.2	503.2	504.1
137.5°	516.1	519.3	522.5	524.4	525.1	525.8	526.5	527.1
140°	533.7	536.5	539.5	541.1	541.7	542.2	542.7	543.3
142.5°	550.3	552.7	555.1	556.5	556.9	557.3	557.7	558.0
145°	576.5	577.7	578.8	579.6	580.0	580.4	580.7	581.1
147.5°	599.9	600.4	600.8	600.9	600.9	600.8	600.7	600.6
150°	615.7	616.1	616.6	616.6	616.1	615.7	615.3	614.9
152.5°	631.8	632.3	632.8	632.8	632.3	631.8	631.2	630.7
155°	652.1	652.8	653.6	653.7	653.2	652.8	652.4	652.0
157.5°	671.0	671.9	672.9	673.0	672.3	671.7	671.0	670.3
160°	682.1	683.0	683.8	684.0	683.4	682.9	682.3	681.8
162.5°	692.3	693.2	694.2	694.3	693.6	693.0	692.3	691.7
165°	705.4	706.3	707.3	707.4	706.7	706.0	705.4	704.6
167.5°	716.1	717.1	718.0	718.2	717.5	716.8	716.1	715.3
170°	722.1	723.0	724.0	724.1	723.3	722.4	721.6	720.7
172.5°	726.5	727.5	728.4	728.5	727.7	726.8	726.0	725.2
175°	731.3	732.3	733.2	733.3	732.5	731.7	730.9	730.1
177.5°	733.6	734.3	734.9	734.9	734.3	733.6	732.9	732.3
180°	733.7	733.7	733.7	733.7	733.7	733.7	733.7	733.7

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